WHAT IS CLAIMED IS:

1. A wireless transmission method for transmitting
packets of asynchronous information to a wireless
transmission apparatus of an information transmission
destination from a wireless transmission apparatus of an
information transmission source in a wireless network formed
using a plurality of transmission apparatuses which are
communication stations, said wireless transmission method
comprising the steps of:

in said wireless transmission apparatus of the
information transmission source,

dividing information to be transmitted from a high-
order layer into packets in sequence at a predetermined
fragment size when the information is received;

adding a sequence number for each of said packets and
buffering the packets in a transmission buffer; and

transmitting said packetized information to said
wireless transmission apparatus of the information
transmission destination under the control of predetermined
access control.

2. A wireless transmission method according to Claim 1,
further comprising:

writing the most recent sequence number buffered in

said transmission buffer in a buffer pointer; and

adding a sequence number starting from the value of said buffer pointer when asynchronous information is next packetized.

3. A wireless transmission method according to Claim 1, further comprising:

writing said buffered sequence number in the buffer pointer; and

storing packets up to a value indicated by a total sequence-number space for the packet for which acknowledgement information is received from said wireless transmission apparatus of the information transmission destination minus one when asynchronous information is next packetized.

4. A wireless transmission method for transmitting packets of asynchronous information to a wireless transmission apparatus of an information transmission destination from a wireless transmission apparatus of an information transmission source, returning acknowledgement information of the received packets to said wireless transmission apparatus of the information transmission source from said wireless transmission apparatus of the information transmission destination after the information

is transmitted, and terminating the transmission of the information to said wireless transmission apparatus of the information transmission destination from said wireless transmission apparatus of the information transmission source in a wireless network formed using a plurality of transmission apparatuses which are communication stations, said wireless transmission method comprising the step of:

in said wireless transmission apparatus of the information transmission source,

waiting for acknowledgement information to be received from said wireless transmission apparatus of the information transmission destination until a predetermined time elapses after the information is transmitted from said wireless transmission apparatus of the information transmission source.

5.   A wireless transmission method for transmitting packets of asynchronous information to a wireless transmission apparatus of an information transmission destination from a wireless transmission apparatus of an information transmission source in a wireless network formed using a plurality of transmission apparatuses which are communication stations, said wireless transmission method comprising the steps of:

in said wireless transmission apparatus of the

information transmission source,

    providing a predetermined transmission window size; and

    transmitting a packet if said packet is within said window size even if the reception of acknowledgement information from said wireless transmission apparatus of the information transmission destination is not confirmed,

    said steps performing transmission control during information transmission.

    6. A wireless transmission method according to Claim 5, wherein said transmission control during information transmission is used for selection-repeat-resend-type automatic resend request control in which information on a packet which could be received from said wireless transmission apparatus of the information transmission destination is transmitted as acknowledgement information to said wireless transmission apparatus of the information transmission source, and only a packet which has not been received is selected and retransmitted from said wireless transmission apparatus of the information transmission source.

    7. A wireless transmission method using selection-repeat-resend-type automatic resend request control in which information on a packet which could be received from said

wireless transmission apparatus of the information
transmission destination is transmitted as acknowledgement
information to said wireless transmission apparatus of the
information transmission source, and only a packet which has
not been received is selected and retransmitted from said
wireless transmission apparatus of the information
transmission source in a wireless network formed using a
plurality of transmission apparatuses which are
communication stations, said wireless transmission apparatus
comprising:

in said wireless transmission apparatus of the
information transmission source,

providing a predetermined transmission window size;

using a low-order bit-map-space area which is two times
as large as said window size, and a high-order-bit
identification pointer for indicating the position in the
total sequence-number space to which said low-order bit-map-
space area corresponds; and

virtually performing transmission control in the total
sequence-number space by repeatedly reusing said low-order
bit-map-space area and said high-order-bit identification
pointer,

said steps performing transmission control during
information transmission.

8. A wireless transmission apparatus for performing transmission of asynchronous information under the control of predetermined access control in a wireless network formed using a plurality of transmission apparatuses which are communication stations, said wireless transmission apparatus comprising:

packetizing means for packetizing asynchronous information in predetermined information units on said wireless network;

buffering means for buffering said packets in a transmission buffer;

sequence number assigning means for assigning a sequence number for each of said packets;

storage means for storing the most recent sequence number buffered in said buffering means as a buffer pointer; and

sequence number adding means for reading the value of said buffer pointer and adding a sequence number when asynchronous information is next buffered.

9. A wireless transmission apparatus for transmitting information in a wireless network formed using a plurality of transmission apparatuses which are communication stations using selection-repeat-resend-type automatic resend request control in which information on a packet which could be

received by a wireless transmission apparatus of an information transmission destination is transmitted as acknowledgement information to a wireless transmission apparatus of an information transmission source, and only the packet which has not been received is selected and retransmitted from said wireless transmission apparatus of the information transmission source, said wireless transmission apparatus comprising:

in said wireless transmission apparatus of the information transmission source,

window size setting means for providing a predetermined transmission window size;

low-order bit-map-space area setting means for setting an area which is two times as large as said window size; and

high-order-bit identification pointer setting means for indicating the position in the total sequence-number space to which said low-order bit-map-space area corresponds,

wherein transmission control in the bit-map spaces of the total sequence-number space is virtually performed by repeatedly reusing said low-order bit-map-space area and said high-order-bit identification pointer.